App. F. IX-4

Previous References

1936 ?
(Geol)

File No. 27-36
Serial Nos. 1-6

Letter References.
Geol. 112-36

(50)

GENERAL AND REVENUE SECRETARIAT.

Serial Nos. Nil

Part B for 37

SUBJECT.

Use of winding ropes in Gifford's shaft Champion Reef gold mine

WD 0418—GPB—22,500—29-8-36

Serial No.	
1	From the chief Inspector of mines & Explosives No 990 dated 2/11/36 Requests that a new winding rope may be permitted to be used at Golconda on the reduced factor of safety, Champion Reef mine) on certain conditions
2	From the chief Inspector of mines & Explosives No 986 dated 2/11/36 States that the Superintendent of Champion Reef mine desires to meet the 2nd member of Council with a view to arrive at the terms on which he will work the new rope on Golconda shaft and requests that arrangement may be made for an interview at an early date
	Submitted. The Superintendent, Champion Reef mine and the Chief Inspector of mines and Explosives desire to meet the 2nd member of Council to discuss the question of using a new winding rope at Golconda shaft on certain conditions. For orders SK Ch 5/11

The main file (2137) has been submitted to the Asst. Sy on 30/10/36

Files must have been submitted to Sec. on the date noted.

File submitted to the Secy on 1/11

Mayor's confidential note. Would this

WD 0417—GPB—30,000—8-9-36

New winding rope, Gifford's Shaft

2310

File No. | of 193 | General and Revenue Secretariat

Serial No.

necessary action is being taken and orders may be expected very soon. As the interview seems necessary both the Supt. consider it desirable the Secretary will be glad to receive him at 3 o'clock on ~~Thursday the 12th~~ Wednesday the 11th instant.

For orders.

Secretary

MW. 6.11.36.

OFFICE OF THE SECOND MEMBER OF COUNCIL
6 NOV. 1936
NO. 3147

Immediate
for
9/11/36

Dft D.O Subd

MW. 9.11.36.

Issued 9.11.36.

D.O.No D 3136	dy 9-11-36	To	The Chief Inspector of Mines.	3

Phone Message recd at 11 A.M today
i.e. 10-11-36

From The Chief Inspector
of Mines. Gorgan

MINES SECRETARIAT
10 NOV. 1936
DEVELOPMENT BRANCH

To The Secretary to Government
development department

The Superintendent, Champion Reefs
has not decided to meet the 2nd Member
of Council tomorrow as an interview is necessary
in the circumstances stated in your D.O. No. D
31-36 Geol 27-36 dated 9-11-1936.

Not clear. Please get it repeated

My

10/11/36

10.11.36.

10.11.36.

11.11.36.

11.11.36

G. R. S. APP F. III—1] 1936-37

GENERAL AND REVENUE SECRETARIAT. (4

(Genl)

NOTES.

File No. 27-36

FILE HEADING.

Use of winding ropes in Giffard shaft, champion Reef Gold Mine

FROM The ~~to~~ Chief Inspector of Mines & Geologists

No. 499 Dated 2/9/36 Received

Diary No. 1194	Enclos. 3 Spare copies —	Serial No. 1.

BRIEF ABSTRACT OF LETTER

Secretary to Recommends the grant of exemption to the Champion Reef Gold Mines of India from Rule 70 (4) (b) of the Kolar Mining Rules in the case of the proposed reduction in factor of safety of winding ropes to be used at Giffard's Vertical shaft Champion Reef Gold Mine

NOTES AND ORDERS.

Subd for orders.

Sd CB

4/9. This question was discussed by the Member with the Chief Inspector and the latter has been asked to consult the Chief Inspector of the Geological Survey, his further letter regarding which is awaited.

Gov B for 15 days

Sd

4/9/36

NOTES—First Sheet

WD 02552—GPB—5,000—10-7-80

30.9.36.

1 - OCT. 1936

DEVELOPMENT BRANCH

30.9.36

New breaking rope, Gifford sheaf

1194 V 2/37

Text

File No. 27 of 1936

General and Revenue Secretariat

From the chief Inspector of mines & boilers

2.

No 886 dated 17/10/36

Referring to the one stated that the recommendations made in his letter d 2/9/36 (read 1 above) may be sanctioned

2 Submitted for orders with reference to para 2 above. The matter is urgent. Secretariat please put up a copy of the Rules and the Regulation does the proposal involve an amendment of rule 70 (4) (b) or does the rule provide for granting exemptions in specific cases?

Sd

Secretariat

28.10.36

A copy of each of the Mysore Regulations & the rules framed thereunder. The chief Inspector recommends the grant of a special exemption from the operation of Rule 70(4)(b) of the mining rules in the case of the rope to be used with Gifford sheaf. There is no provision in the rules for the grant of such exemption. The proposal does not involve an amendment of Rule 70(4)(b), as the exemption is asked for only in the case

Serial No.

9 Grand Stop- case. Law Section may perhaps be consulted in the matter.

10. CB b The existing rules do not seem to provide for the grant of exemptions in the circumstances of this case or of any other case. The Rule (70(4)(b)) has I think to be amended before any exemption can be granted. The Law Section may perhaps be consulted

Sir Henry 31.10.36

7 Home Secy Law very urgent- Kindly return today.

HW. 5.11.36

8 Mr Gayatri is on leave.

I have examined the Regulations and the rules. I agree with the note-writer that the present rule has to be modified before exemption can be granted.

9 The rule may be modified by Govt also if this publication does not seem necessary.

10 The amendment may be on the lines of the S. Mysore rule. We may add to the existing rule at the beginning the following words "unless

WD 0417—GPB—30,000—8-9-36

New - winding rope - Gifford's shaft

b

1124/2/37

Gen'l File No. 27 of 1936

General and Revenue Secretariat

Serial No.

DEWAN'S OFFICE 9 NOV. 1936 No. 1259

OFFICE OF THE SECOND MEMBER OF COUNCIL 9 NOV. 1936 No. 3168

exemption has been obtained from Govt in connection with the proposed shaft or the new winding rope.

11 The necessary exemption may then be issued as the technical opinion is in favour of it.

12 Forwarded.

Secretary

MW. 6.11.36.

Ag 6.11.36

13 I agree (Maybe subject to the above)

Secy 8/11/36.

Dewan

MW. 9.11.36.

Ag 9.11.36

14. Mr. 9-11-36

MW. 10.11.36.

Ag 10.11.36

15 — Submitted with a draft notification for approval. After issue the file may well be consigned to the record room.

Secy 11/11

16 Submitted for orders

Ag 11.11.36.

17 As regards

MW. 12.11.36.

Secy 12.11.36.

TYPING SECTION 12 NOV. 1936 GENL & REV. SECTT

3433 12/11

Issue & Submit

Telephone Message

2592

From The Chief Inspector of Mines
K.S.7

To The Secretary to the Government
development department

DEV. SECRETARIAT
17 NOV. 1936
DEVELOPMENT BRANCH

I request that issuing of orders regarding exempt under the amended Rule No. 70 (4B) Mysore Mining Rules for winding rope tinsurred shafts, as recommended in my letter No 990 dated 2nd November 193- may kindly be expedited as the Superintendent Champion Reefs is pressing for it

Arrangement may please
be made today A.M.

17/11/36

17.11.

New winding rope, Gilfillan's shaft

2137 V2309 V2310 V2494 V2554

General and Revenue Secretariat | Gol File No. 27 of 1936. | [App. F. III—2

Serial No.	
5	D 3255 dt 16-11-36 To Compiler, Mys. Gazette. ~~Notifn~~ Issues an amendment to Rule 70(4)(b) of the Rules under the Mys Mining Reg.
	D 3256 dt 16-11-36 Copy to ~~Dy~~ Chief Insp. of mines & explosives.

The Govt notification amending Rule 70(4)(b) of the Mysore Mining Rules has been issued.

The Chief Inspector states that the proposed new winding rope satisfies all the conditions imposed upon it by the Govt Mining Engineer of South Africa & that the Chief Inspector of mines in India considers the arrangement proposed for testing the rope. He therefore recommends sanction to the grant of exemption in the case of the rope to be used in Gilfillan shaft subject to the conditions mentioned in his letter dated 2/11/36. ~~From~~ In orders issuing to the GO paras 11 above & 17 above.

16/11 → DW Lee 18-11-36

Draft GO may be sent

Secretary

18-11-36

GJ 18-11-36

DW 20/11/36

20.11.36.

DSW GJ 20.11.36

Flag O.

Send with a draft G.O.

SECOND MAIL 16 NOV 1936 No. 35-25

NOTE—Contn. Sheet.

WD 0417--GPS—80,000-8-9-36

2592

Lycal File No. 25 of 1936.

General and Revenue Secretariat

Serial No.	
6	D 3383 d/23-11-36 To The Chief Insp. of mines and Exp. KGF Sanctions under rule 70 (4) (b) of the mys. mining rules, the recommendation of the Chief Inspector of mines to operate the new winding rope in Giffard's shaft on the lower factor of safety subject to certain conditions

B
Gr
2814

GEN. & REVS. SECRETARIAT
28 NOV 1936
DEVELOPMENT BRANCH

GOVERNMENT OF MYSORE.

Telegraphic Address :—
"MINESPECTOR"

DEPARTMENT OF MINES AND EXPLOSIVES.

No. 499
Encl. 3

Dated Oorgaum, 1st September *1936.*
(S. India). 2nd.

1194
3 - SEP. 1936
DEVELOPMENT BRANCH

FROM

C. E. SURYANARAYANA RAU, ESQ., MEM., A.I.M.E., ETC.,
Chief Inspector of Mines and Explosives in Mysore.

Epdl. 27-36-1

To

M. Venkatanaranappa, Esq., B.A.,
Secretary to the Government of His Highness
the Maharaja of Mysore, Development Department,
B a n g a l o r e.

Sir,

Giffords Vertical Shaft in Champion Reef Gold Mine, circular in shape, brick lined and 18 ft. in diameter in the clear, was sunk to a depth of 3860 ft. below surface and has been in commission for over 20 years. It is now being deepened from various horizons to an ultimate depth of 6556 ft. below surface to facilitate single stage winding from ultra deep levels. A powerful Electric Winder, capable of a rope speed of 3000 ft. per minute, will be installed on surface.

Preformed triangular strand steel wire rope $1^{7}/_{8}$" in diameter is proposed to be used on this winder. A copy of its specification supplied by Messrs.Haggie, Son & Love, Limited, rope manufacturers, is enclosed. This Firm has supplied the deepest mines on the Rand with ropes of this type. They consider this rope more suitable than the "non-spinning type" for conditions obtaining in Gifford's Shaft.

The factor of safety of this rope for the various loads expected to be raised by it are as under:-

1. For raising ore:-

C E Rau

1. For raising ore:-

Weight of ore ...	10,000	lbs.
Weight of empty trucks, 2 on each deck of the cage	3,040	"
Weight of cage and its attachments	7,645	"
Weight of rope 6657 ft. long at 6.195 lbs per ft.	41,240	"
Gross weight ...	61,925	"
In tons (2,000 lbs.) ...	30,962	Tons.
Factor of Safety when new ...	5.65	
" at discard ...	4.80	
Capacity factor at the lower end of rope:-		
(1) When new ...	16.92	
(2) At discard ...	14.38	

2. For raising ore and persons:-

Weight of rope ...	41.240	lbs.
Weight of cage and its attachment	7,645	"
Weight of 2 loaded trucks in the bottom deck	6,520	"
Weight of 25 persons on the top deck at 110 lbs. each	2,750	"
Gross Weight ...	58,155	"
Factor of safety When new ...	6.01	
" at discard ...	5.10	
Capacity factor at lower end of rope:-		
(1) when new ...	20.69	
(2) at discard ...	17.58	

3. For raising persons only:-

Weight of rope ...	41,240	lbs.
Weight of cage and its attachments	7,645	"
Weight of 50 persons, 25 in each deck at 110 lbs. each	5,500	"
Gross Weight ...	54,385	"
Factor of safety when new ...	6.43	
" at discard ...	5.47	
Capacity factor at lower end of rope:-		
(1) When new ...	26.62	
(2) at discard ...	22.63	

C E S Rao

Mysore

Mysore Mining Rule No.70 (4) (b) says that

> "winding ropes shall not be used for "raising and lowering persons, when "owing to deterioration or from any "other cause, the breaking stress had "become reduced to below six times "the maximum working load."

The factor of safety of the rope as per above calculations is 5.65 for hauling ore, 6.01 for raising men and material and 6.43 for raising and lowering of persons. Since the strength of the rope is liable to get reduced in due course owing to wear and tear below the prescribed factor of safety - six times the maximum working load - the Superintendent, Champion Reef Mine applied for permission to reduce the factor of safety of the rope from 6 to 5.

Single stage winding from ultra deep levels - from depths exceeding 4,000 ft. deep - has been in vogue in South Africa in recent years. The rule regarding the factor of safety of winding ropes in that country is as follows:-

REGULATION 37 (11)

> "Unless exemption has been obtained from "the Government Mining Engineer in consi- "deration of the great depth of the shaft "or of the low winding speed, no winding "rope shall be used when the breaking "load at any point therein has become "reduced to less than six times the "maximum working load".

On receipt of the application for exemption from the Superintendent, Champion Reef Mine, I put myself in communication with the Government Mining Engineer at Johannesburg regarding the proposed reduction of factors of safety of winding ropes at Gifford Shaft. A copy of his letter, received in reply to mine, is enclosed for reference. He writes that exemption has been granted to discard winding ropes used in Simmer & Jack's Vertical South Deep Shaft, which has a depth of 6,300 ft. from collar to bottom, or 6460 feet from sheave to bottom, when the factors of safety at the sheave wheels have been reduced to 5.00 for winding persons or material

C E & Rau

and

and to 4.7 for winding rock, the corresponding capacity factors i.e. the factors of safety at the lower end of ropes being 16 and 13 respectively.

In the case of Gifford Shaft it is proposed to discard the ropes when the factors of safety at the sheave wheel have become reduced to 5.47 for winding men, 5.10 for men and material and 4.8 for ore as against 5.00 for men and 4.7 for ore in South Deep Shaft. The corresponding capacity factors at the lower end of ropes in Gifford's when new and at discard are:-

26.62 and 22.63 respectively in the case of men.
20.69 and 17.58 " in the case of men and material.
16.92 and 14.38 " in the case of ore only,

as against the discard factors of 16 and 13 in the case of men and ore in South Deep Shaft. For purposes of comparison the salient features of the 2 shafts are noted below:-

		Gifford Shaft.	South Deep Shaft
Depth from collar to bottom	...	6,556 feet	6,300 feet
" sheave to bottom	...	6,657 "	6,460 "
Diameter of rope ...	...	$1\frac{7}{8}$"	2"
Weight of rope per foot ...	...	6·195 lbs.	6·893 lbs.
Breaking strain of rope ...	...	175 tons	188 tons.
Gross Weight (1) for Men	...	54,385 "	64,815 "
(2) men and material	...	58,155 "	...
(3) for ore	...	61,925	69,520 "
Factor of safety:-			
(1) For Men .. When new	...	6.43	5.72
(1) For Men .. At discard	...	5.48	5.00
(2) For Men and Material When new	...	6.01	..
(2) For Men and Material At discard	...	5.10	..
(3) For ore only When new	...	5.65	5.41
(3) For ore only At discard	...	4.80	4.70

Capacity factors, that is, the breaking load of rope divided by the load at lower end of rope:-

(1) For

C E & Rau

		Gifford Shaft	South Deep Shaft
(1) For Men	When new ...	26.62	...
	At discard ...	22.63	16.00
(2) For Men and Material	When New ...	20.69	...
	At discard ...	17.58	...
(3) For ore only	When New ...	16.92	...
	At discard ...	14.38	13.00

The Government Mining Engineer has specially drawn my attention to Regulation 34 (8) which is as follows:-

> "In case a winding rope is used both for the "raising and lowering of persons and for other "purposes, the weight attached to the rope in the "former case when the cage, skip or other means of "conveyance is bearing its authorised load, shall "not exceed 0.85 of the maximum weight when the "rope is in use for other purposes."

He considers this an important provision for general safety and says that no departure from it is permitted.

In the case of Gifford Shaft the authorised loads are:-

Weight of ore ...	10,000 lbs.
Weight of four trucks ...	3,040 "
Weight of cage and its attachments	7,645 "
Total mixiumum weight	20,685 lbs.
.85 of maximum weight ...	17,752 lbs.

The actual weights raised on the rope are:-

1. For men and material	16,950 lbs.
2. For men only ...	13,145 "

both of which are within the limit prescribed in the above rule.

The Government Mining Engineer further states that applications for exemptions in respect of shafts of greater depth than 4,000 feet are dealt with on their merits and adds that the Departmental minimum requirements are:-

(1) Tensile

C.E.S.Rau

(1) Tensile strength of steel from which winding rope is made must not exceed 134 tons of 2,000 lbs per square in. In the case of the proposed rope at Gifford's the tensile strength is 134 tons (see Specification of rope quoted by Messrs. Haggie, Son & Love, Limited).

(2) Discard factor of safety for persons or material at sheave wheel must not be less than 5.00, the corresponding capacity factor to be not less than 10.

The discard factors of safety at Giffords are:-

(a) In the case of men ...	5.48
(b) In the case of men and material	5.10

and corresponding capacity factors are:-

(a) In the case of men ...	22.63
(b) In the case of men and material	17.58

(3) Discard factor of safety for rock at sheave wheel must not be less than 4.7, the corresponding capacity factor to be not less than nine.

The discard factor of safety under this head at Gifford's is 4.80 and the corresponding capacity factor is 14.38.

All these figures have been calculated after allowing a reduction of 15 % on the strength of the winding rope when new.

The brakes provided on the winder, which are of the latest type, are so designed as to minimise the effects of kinetic stresses set up in the rope due to accelleration and decelleration.

I have herein enclosed 2 Schedules A and B received from the Superintendent, Champion Reef Gold Mine containing particulars regarding the application for a reduction of the safety factor of winding ropes. As the proposed rope satisfies all the conditions under which exemption has been granted to mines similarly situated in South Africa, I see no objection to grant similar exemption in the case of the rope to be used in Gifford Shaft. I request that Government may be

C E S Rau

be pleased to grant the exemption asked for.

Early orders are requested in the matter as the future programme of this mine is largely dependent upon this sanction.

I have the honour to be,

Sir,

Your most obedient servant,

C E Srinivasayyangar

CHIEF INSPECTOR OF MINES &

EXPLOSIVES IN MYSORE.

D.S.R.

C O P Y.

HAGGIE, SON & LOVE (1936) LTD.

Union House,
80 Main Street,
Johannesburg,
26th May 1936.

The Champion Reef Gold Mines of India, Ltd.,
6, Queen Street Place,
London, E.C.4.

Dear Sirs,

We are in receipt of your letter of the 4th inst., and thank you for your enquiry for Steel Wire Winding Ropes.

We have pleasure in submitting specification and quotation for 1-7/8" diameter "Preformed Triangular Strand Steel Wire Rope" which we consider to be more suitable than "Non-Spin" for the conditions specified in your letter.

We have supplied the deepest Mines on the Rand with ropes of this type and in every instance the results have been highly satisfactory. We give hereunder a few of the Mines where our ropes are at present in use and where conditions are similar to those specified in your letter:-

Robinson Deep, Ltd.	2 lengths	4,950'	1-7/8"	6 x 31
Simmer & Jack Mines, Ltd.	6 "	7,100'	2"	6 x 32
Vlakfontein G.M.Co.	2 "	6,300'	2"	6 x 32
Randfontein Estates G.M.	2 "	5,500'	2"	6 x 32
City Deep, Ltd.	2 "	5,300'	2-1/4"	6 x 34

The lubrication we would recommend is our "Jupiter" Rope Grease, which is very adhesive, always remains plastic and is guaranteed free from all acids and sulphur.

x x x x x

Yours faithfully,

HAGGIE, SON & LOVE, (1936) LTD.,

Sd. ...

General Manager.

HAGGIE, SON & LOVE (1936) LTD.

1-7/8" Diameter 6 x 31 Triangular Strand Steel Wire Rope.

Weight per foot - 6.195 lbs.

Breaking Strain - 175 tons (2000 lbs.)

	Rock - lbs.		Men - lbs.
Ore	10,000	Men	9,270
Trucks	3,040		-
Cage, etc.	7,566		7,566
Rope:			
6556 + 114' = 6,670' @ 6.195 lbs. per foot	41,320		41,320
Gross Weight	61,926		58,156
Tons (2000)	30.963		29.078
Factor	5.65		6.018

C E S Rae

17

HAGGIE, SON & LOVE, (1936) LTD.

80 Main Street, Johannesburg,
26th May 1936.

Q U O T A T I O N.

SPECIFICATION OF STEEL WIRE ROPE.

Enquiry: CHAMPION REEF GOLD MINES OF INDIA, LIMITED
Letter of 4.5.1936.

DIMENSIONS OF ROPE -

Length	..	as required.
Diam.	..	1-7/8"
Circum.	..	5-7/8"

TRIANGULAR STRAND
PREFORMED.

CONSTRUCTION OF ROPE -

Lay	..	Lang's
No. of strands		6
Class of Core		Manilla.

Specially Lubricated.

CONSTRUCTION OF STRANDS -

No. of Wires 31 (13 over 12 over 6)
Diam. of Wires (Decimals of an Inch) .126" outer. .084" inner.
Class of Core .. 6 Steel Wires laid up in Triangular Form.

CLASS OF STEEL OF WHICH WIRE IS MADE	..	EXTRA SPECIAL IMPROVED PLOUGH ACID.
BREAKING STRESS OF STEEL	..	134 Tons (2000 lbs.)
WEIGHT OF ROPE PER FOOT.	..	6.195 lbs.
BREAKING STRAIN OF ROPE	..	175 Tons (2000 lbs.)
PRICE PER YARD.	..	9/4½ d. nett

DELIVERED f.o.b. DURBAN, NATAL, SOUTH AFRICA.

PACKED ON STRONG WOODEN REEL FOR EXPORT.

HAGGIE, SON & LOVE (1936) LTD.,

Sd.

The Champion Reef G.M. of India, Ltd.,
6, Queen Street Place,
London, E.C.4.

C E S Rao

Letter No.G.M.E.135/39/9 dated 20th April 1936 from the Government Mining Engineer, Johannesburg, to the Chief Inspector of Mines & Explosives in Mysore, Oorgaum, Kolar Gold Field.

---ooo---

Proposed reduction in factors of safety of winding ropes at Gifford's Vertical Shaft, Champion Reef Gold Mine, Mysore, Southern India.

1. In reply to your letter of the 12th March on the above subject, I have the honour to inform you that this Department has granted exemption to the Simmer and Jack Mines, Limited, from Regulation 37 (11) of the Mines and Works Act and Machinery Regulations, to the extent that winding ropes used in its Vertical South Deep Shaft, which has a depth of 6,300 feet from collar to bottom, may be discarded when the factors of safety at the sheave wheels have reduced to 5.0 for winding persons or material and to 4.7 for winding rock, the corresponding capacity factors, that is, the factors of safety at the lower end of the ropes, being sixteen and thirteen, respectively.

Regulation 37 (11) referred to above reads as follows:-

> "Unless exemption has been obtained from the Government Mining Engineer, in consideration of the great depth of the shaft or of the low winding speed, no winding rope shall be used when the breaking load at any point therein has become reduced to less than six times the maximum working load. The maximum working load shall include the weight of the rope in the shaft when the cage, skip, or other means of conveyance is at the lowest working point, and the weight of such conveyance or conveyances with the authorised load of persons or material."

It has been ruled by the Government Mining Engineer that the term "Material" does not include rock.

C E S Rau

2. Your attention is specially directed to our Regulation 34 (8), which requires that a ratio of 0.85 between the persons and material load and that of the rock load shall not be exceeded This Department considers it an important provision for general safety and no departure from it is permitted.

3. Normally, exemption from Regulation 37 (11) is not granted in respect of winding ropes used in vertical shafts of lesser depth than 4,000 feet. Applications for exemptions in respect of shafts of greater depth than 4,000 feet are dealt with on their merits, but the Department's minimum requirements are as follows:-

> Tensile strength of steel from which winding rope is made must not exceed 134 tons of 2,000 lbs. per square inch.
>
> Discard factor of safety for persons or material at sheave wheel must not be less than 5.0, the corresponding capacity factor to be not less than 10.
>
> Discard factor of safety for rock at sheave wheel must not be less than 4.7, the corresponding capacity factor to be not less than 9.
>
> Reduction in winding rope strength at discard to be not less than 15 per cent.

4. In granting exemption from Regulation 37 (11), this Department also attaches the greatest importance to controlled braking of winders, in order to minimise the effect of kinetic stresses set up in the winding ropes due to acceleration and deceleration

---oOo---

"Copy"

C E S Rae

D.S.R.

SCHEDULE B.

THE CHAMPION REEF GOLD MINES OF INDIA, LIMITED.
(Incorporated in England).

(3)

APPLICATION FOR A REDUCTION OF THE SAFETY FACTOR OF WINDING ROPES.

Name of Shaft ..	Gifford's Vertical.
Depth of shaft (from collar to lowest loading point). ..	6556 feet.
Type of Hoist - Electric or Steam	Electric - Ward Leonard.
Diameter of drums ..	13 feet to 35 feet Bicylindro-conical.
Diameter of Sheave Wheels ..	16'0" dia.
Maximum Winding speed for persons feet per minute ..	3000 feet.
Are persons, material and rock raised and lowered? ..	Yes.
Description of winding ropes ..	Preformed Triangular strand, langslay manilla core.
Construction of winding ropes ..	6/31 (13 over 12 over 6)
Breaking stress of steel of rope per square inch (tons of 2000 lbs)	123/134 tons.
Breaking load of rope (tons 2000 lbs)	175 tons. Actual.
Weight of rope per foot ..	6.195 lbs.
Total length of wind (sheave) LH. to lowest loading point) RH.	6639 feet. 6657 "
Weight of cage, attachments, detaching hooks, safety catches &c.	7645 lbs.
Material from which cage is made	Steel frame, duralumin plated
Maximum Ore Load	10000 lbs.
Maximum Material Load ..	7750 "
Authorised load of persons ..	50
Rate of acceleration or time taken and distance travelled to acquire full winding speed from rest, with load of persons	On Scroll 1.79 f.p.s.p.s. On 35' drums 1.07 f.p.s.p.s.
Type of brakes fitted to hoist	Primary-Electric Regenerative. Secondary-Mechanical, gravity, Oil pressure.
Maximum rate of deceleration with load of persons	As for acceleration.

FULL REASONS FOR MAKING THE APPLICATION.

1. Depth of shaft is such as to result in a high reserve of strength in rope.
2. Type of winders - Electrical Ward Leonard - is such as to result in smooth operation with consequent small range of oscillatory stresses in winding ropes.
3. Type of Brakes - Primary-Electric Regenerative - is such as to cause the hoist to be pulled up no more violently than during ordinary retardation. Secondary - Gravity oil pressure controlled - is such as to minimise the effect of breaking stresses.

C E S Rau

1st September 1936.

MS.

SCHEDULE A.

THE CHAMPION REEF GOLD MINES OF INDIA, LIMITED.
(Incorporated in England.)

14

APPLICATION FOR EXEMPTION FROM PROVISIONS OF

SECTION IX - RULE No.70 (b).

FACTORIAL DETAIL:

SHAFT:

Shaft.	Compartments	PROPOSED MINIMUM FACTOR OF SAFETY OF WINDING ROPES CALCULATED AT THE SHEAVE WHEEL THE CONVEYANCES ARE THE LOWEST POINT OF THE WIND.		
		When conveying men	When conveying men and material.	When conveying ore.
Gifford's Vertical.	1 and 2	5.47 discard 6.43 new	5.10 discard 6.01 new	4.80 discard 5.65 new
		PROPOSED MINIMUM FACTOR OF SAFETY OF WINDING ROPES CALCULATED AT THE POINT OF ATTACHMENT TO CONVEYANCE.		
		When conveying men	When conveying men and material.	When conveying ore.
		22.63 discard 26.62 new	17.58 discard 20.69 new	14.38 discard 16.91 new

Champion Reefs

1st September 1936.

C E & Rau

MS.

Geol 27.96 2

GOVERNMENT OF MYSORE.

Telegraphic Address :—
"INSPECTOR"

DEPARTMENT OF MINES AND EXPLOSIVES.

Dated Oorgaum, 17th October 193 6
S. India).

No. 886
Encl. 3

CHIEF SECRETARIAT
2137
19 OCT. 1936
DEVELOPMENT BRANCH

FROM

C. E. SURYANARAYANA RAU, ESQ., MEM., A.I.M.E., ETC.,
Chief Inspector of Mines and Explosives in Mysore.

To

M. Venkatanaranappa, Esq., B.A.,
Secretary to the Government of His Highness
the Maharaja of Mysore, Development Department
B a n g a l o r e.

Sir,

In continuation of my letter No.499 dated 2nd September 1936 regarding the factor of safety of new ropes to be used in Gifford's Shaft, I have the honour to enclose herein copy of D.O. letter No.14994 dated 7th October 1936 received from Dr. Penman, D.Sc., &c., Chief Inspector of Mines in India on this subject. He writes to say that as far as he could judge, he sees no reason why the exemption asked for should not be granted. He has enquired whether it is essential that materials should be raised when men are being raised and opines that it is desirable to avoid it. He seems to have suggested this under the impression that the cages in use are single decked. Double decked cages will be in use at Gifford's and there will be no objection to carry a few men on the top deck with material loaded in the bottom deck. This practice has been in vogue on this Field for many years and there will be no objection to continue it if the total load is within the prescribed limit. Dr. Penman thinks that the arrangement I have proposed for the testing of the rope as contained in my letter dated 1st October 1936 copy enclosed for ready reference - should be sufficient.

I therefore request that the recommendation made in my letter No.499 dated 2nd September 1936 may kindly be sanctioned. At the instance

instance of Messrs. John Taylor & Sons, ; The Superintendent of Champion Reef Mine has been pressing for this to enable them to place the order for the proposed new winder. Copy of his letter No.725 dated 14th October 1936 is enclosed.

As the matter is urgent, very early orders of Government are solicited.

I have the honour to be,

Sir,

Your most obedient servant,

C.E. Srinivasayyangar

CHIEF INSPECTOR OF MINES &

EXPLOSIVES IN MYSORE.

D.S.R.

D.O. letter No.14994 G dated 7th October 1936 from the Chief Inspector of Mines in India, to the Chief Inspector of Mines & Explosives in Mysore.

With reference to your D.O. letter No.544 dated 8th September 1936, and your further D.O. letter No.731, dated 1st October 1936, I write to say that, so far as I can judge, I see no reason why you should not recommend to your Government the granting of the exemption asked for in connection with the Gifford's shaft. I do not know whether it is essential that materials should be raised when men are being raised but if this can be avoided it is desirable. I think the arrangement you propose for the testing of the rope as contained in your letter, dated 1st October 1936, should be sufficient.

'Copy'

C E S Rao

Chief Inspector of Mines &
Explosives in Mysore.
17/10/1936.

D.S.R.

D.O. letter No.731 dated 1st October 1936 from the Chief Inspector of Mines & Explosives in Mysore to the Chief Inspector of Mines in India.

NEW WINDING ROPE, GIFFORD SHAFT.

I beg to acknowledge, with thanks, receipt of your D.O. letter No.G.13999 dated 17th September 1936 regarding the new winding rope proposed to be used at Gifford's, the breaking load of which is 175 short tons. There is no machine in South India, powerful enough to test the breaking strength of such winding ropes. There is one machine in the Engineering College at Madras, but its capacity is limited to 100 short tons only. I shall be glad to know if there is one in Calcutta or elsewhere in India.

As you know we wind in this Field from depths varying from 3 to 4 thousand feet and the breaking strain of ropes both locked coil and Langslay types in use here is about 140 to 150 short tons. Particular care is taken of the ropes to maintain them in good condition.

They are examined in detail every week for external wear and broken wires and recapped every six months, after cutting off a length of about 10 or 12 feet, mostly at the cage end and sometimes at both ends. The cut piece is afterwards fully opened up and carefully examined for internal corrosion fatigue and wear. Every 50 feet of the rope is thoroughly cleaned and a more detailed examination is made. It is also calipered to ascertain of there is any reduction in diameter. In addition to the above, every 100 feet, the distance between a given number of strands is measured and noted; in the case of any excessive stretch the rope is discarded.

A complete log of every rope is maintained. The life of a winding rope depends upon several factors. It is within our -- experience here that short lengths of ropes cut off from discarded ropes and sent home for examination and testing have not shown any appreciable deterioration even after 3 or 4 years use in down cast vertical

19

vertical shafts, either circular and rectangular in shape and practically free from moisture.

In the case of the new rope under consideration it is my intention to insist upon recapping it every six months and send home as early as possible a portion of the cut piece of the rope for testing and get the result of such test by cable, so that the rope may be changed without delay. This is an extra provision which I would like to make in granting the exemption asked for.

I shall be pleased to furnish you any further information required in this matter.

'Copy'

C S Rau

Chief Inspector of Mines &
Explosives in Mysore.
17/10/1936.

D.S.R.

Letter No.725 dated 14th October 1936 from the Superintendent, Champion Reef Gold Mines of India, Limited, to the Chief Inspector of Mines & Explosives in Mysore.

I have the honour to inform you that Messrs. John Taylor & Sons have pointed out that they are unable to place the order for the proposed new winder at Gifford Shaft until they have Government's consent to use ropes with the lower factor of safety applied for.

I should be much obliged if you could do anything to expedite this matter.

'Copy'

C E S Rao

Chief Inspector of Mines &
Explosives in Mysore.
17/10/1936.

D.S.R.

Year 27-36

GOVERNMENT OF MYSORE.

Telegraphic Address :— "MINESPECTOR"

DEPARTMENT OF MINES AND EXPLOSIVES.

21

Dated Oorgaum, 2nd November *193* 6
(S. India).

No. 990
Encl. 3.

2309
GEN. & REV. SECRETARIAT
4 NOV. 1936
DEVELOPMENT BRANCH

FROM

C. E. SURYANARAYANA RAU, ESQ., MEM., A.I.M.E., ETC.
Chief Inspector of Mines and Explosives in Mysore.

To

M. Venkatanaranappa, Esq., B.A.,
Secretary to the Government of His Highness
the Maharaja of Mysore, Development Department,
B a n g a l o r e.

2137 Aug 30/36

Sir,

In continuation of my letter No.886 dated 17th October 1936 regarding the reduction of the factor of safety of the new rope to be used in Gifford Shaft to facilitate single stage winding from a depth of 6556 ft., I have the honour to enclose herein copy of letter No.725 dated 2nd November 1936 received from the Superintendent, Champion Reef Mine on the same subject from which it is seen that tenders received by the Managers, Messrs. John Taylor & Sons, London, for the new Electric Winder for Gifford Shaft are pending disposal for want of sanction by Government of their request to operate the rope on the lower factor of safety, i.e., to discard the rope when its breaking stress has become reduced to below five times the maximum working load instead of six times prescribed under Rule 70 (4) (b), Mysore Mining Rules. The practice of working on reduced factor of safety has been in vogue in South Africa and the opinion of the Government Mining Engineer of that country on the rope in question was obtained and forwarded to Government with my letter, No.499 dated 2nd September 1936. This rope satisfie all the conditions prescribed under the regulations in force in South Africa and all the departmental minimum requirements referred to in his letter.

I have also consulted the Chief Inspector of Mines in India on this

this subject. He has written to say that as far as he could judge he sees no reason why the exemption asked for should not be granted. His letter was also submitted to Government with my letter No.886 dated 17th October 1936.

He enquired whether it is essential that materials should be raised when men are being raised and opined that it is desirable to avoid it. I have written to him explaining the necessity for allowing a few men to ride on the top deck with trucks in the bottom deck. Copy of my letter No.922 dated 21st October 1936 is enclosed for reference.

As the proposed new rope satisfies all the conditions imposed upon it by the Government Mining Engineer of South Africa and as the Chief Inspector of Mines in India considers sufficient the arrangement proposed for testing the rope as contained in my letter to him - copy of letter No.731 dated 1st October 1936 enclosed for reference - and has also opined that the exemption asked for may be granted, I request that the Government may be pleased to accord sanction to operate the rope on the lower factor of safety, subject to the following conditions:

(1) The rope to be discarded when the breaking stress has become reduced to 5.10

(2) The rope to be recapped every six months, a portion of the rope cut at the time sent to a recognised testing Laboratory and the result of the test to be obtained by Cable and notified without delay to the Chief Inspector of Mines and Explosives in Mysore.

(3) Not more than 12 persons to ride at the top deck when the bottom deck is loaded with ore trucks.

Early orders of Government are solicited.

I have the honour to be,
Sir,
Your most obedient servant,

C E Srinivasayya Rao
CHIEF INSPECTOR OF MINES &
EXPLOSIVES IN MYSORE.

D.S.R.

D.O. letter No.992 dated 21st October 1936 from the Chief Inspector of Mines & Explosives in Mysore, Oorgaum, to the Chief Inspector of Mines in India, Dhanbad.

---: o :---

I beg to acknowledge, with thanks, receipt of your D.O. letter No.G.14994 dated 7th October 1936 stating that you see no reason why I should not recommend to my Government the granting of the exemption asked for regarding the reduction in the factor of safety of winding rope to be used in Gifford's Shaft. I also note that you consider the arrangement proposed in my letter No.731 dated 1-10-36 for the testing of the rope should be sufficient.

Regarding your enquiry whether it is essential that materials should be raised when men are being raised, and the desirability of avoiding it if possible, I write to state that it is essential to do so for the following reason, and such practice has been in vogue in this Field for some years past:

Cages with 2 decks have been designed for use in Gifford's Shaft intended to carry two ore trucks on each deck, or four trucks in all. At the change of shifts when the number of persons to be handled is large, both the decks will be used for raising and lowering of persons only. In between shifts it will be necessary for the supervising staff and others to use the cages to get to the various working points. In this case two trucks will be loaded in the bottom deck while persons ride on the top deck. It is for this reason that factors of safety have been calculated for all the three cases viz. (1) for conveying men only (2) for conveying men and material or ore (3) for conveying ore trucks only. The factor of safety is taken for the worst conditions that could obtain, viz., 25 men on the top deck together with two full trucks of ore in the bottom deck.

I have already written to you in my letter No.731 dated 1st October 1936 that it is my intention to insist upon recapping the rope every six months and getting the cut piece of rope tested in England and the result communicated by cable. As a further precaution, I will

restrict

restrict the number of persons riding on the top deck to 12 when material is loaded in the bottom deck although each deck has been designed to carry 25 persons.

I shall be glad to furnish you any further information required in the matter.

----: oOo :----

"C o p y"

C E S Rao

Chief Inspector of Mines &
Explosives in Mysore.

M.S.2/11/36.

Letter No.725 dated 2nd November 1936 from the Superintendent, Champion Reef Gold Mines of India, Ltd., Champion Reef, to the Chief Inspector of Mines & Explosives in Mysore, Oorgaum.

-: o :-

I have this morning received by Air Mail a letter from the Managers, Messrs. John Taylor & Sons, informing me that tenders for the New Winder for Gifford Shaft are being received and that it is of the greatest importance for the future working of the mine that the order for this Winder should be placed at the earliest possible moment, but as this cannot be done until Government give their sanction to operate on the lower factor of safety, the Managers have asked me to again request you to impress on Government how urgent this matter is. I shall be glad therefore if you will kindly take the necessary steps to get the sanction of Government without further delay.

-: o :-

" C o p y "

C E S Rao

Chief Inspector of Mines &
Explosives in Mysore.

M.S.2/11/36.

D.O.letter No.731 dated 1st October 1936 from the Chief Inspector of Mines & Explosives in Mysore, to the Chief Inspector of Mines in India, Dhanbad.

New Winding Rope, Gifford's Shaft.

I beg to acknowledge, with thanks, receipt of your D.O. letter No.G.13999 dated 17th September 1936 regarding the new winding rope proposed to be used at Gifford's, the breaking load of which is 175 short tons. There is no machine in South India, powerful enough to test the breaking strength of such winding ropes. There is one machine in the Engineering College at Madras, but its capacity is limited to 100 short tons only. I shall be glad to know if there is one in Calcutta or elsewhere in India.

As you know we wind in this Field from depths varying from 3 to 4 thousand feet and the breaking strain of ropes both locked coil and Langslay types in use here is about 140 to 150 short tons. Particular care is taken of the ropes to maintain them in good condition.

They are examined in detail every week for external wear and broken wires and recapped every six months, after cutting off a length of about 10 or 12 feet, mostly at the cage end and sometimes at both ends, The cut piece is afterwards fully opened up and carefully examined for internal corrosion fatigue and wear. Every 50 feet of the rope is thoroughly cleaned and a more detailed examination is made. It is also calipered to ascertain if there is any reduction in diameter. In addition to the above, every 100 feet, the distance between a given number of strands is measured and noted; in the case of any excessive stretch the rope is discarded.

A complete log of every rope is maintained. The life of a winding rope depends upon several factors. It is within our experience

here

here that short lengths of ropes cut off from discarded ropes and sent home for examination and testing have not shown any appreciable deterioration even after 3 or 4 years use in down cast vertical shafts, either circular and rectangular in shape and practically free from moisture.

In the case of the new rope under consideration it is my intention to insist upon recapping it every six months and send home as early as possible a portion of the cut piece of the rope for testing and get the result of such test by cable, so that the rope may be changed without delay. This is an extra provision which I would like to make in granting the exemption asked for.

I shall be pleased to furnish you any further information required in this matter.

"Copy"

C E S Rau

Chief Inspector of Mines &
Explosives in Mysore.
2/11/1936.

GOVERNMENT OF MYSORE

Yol 27-36

Telegraphic Address: "INSPECTOR"

DEPARTMENT OF MINES AND EXPLOSIVES.

2310

D.O.No. 986.

Dated Oorgaum, 2nd November 1936.
(S. India).

DEV. & REV. SECRETARIAT
4 NOV. 1936
DEVELOPMENT BRANCH

Dear Mr. Venkatanaranappa,

The Superintendent of Champion Reef Mine desires to meet the 2nd Member of Council in connection with the grant of permission to work the new ropes in Gifford Shaft on the reduced factor of safety. I am sending an official letter today on the same subject. I shall be obliged if you will kindly arrange for an interview at an early date. I will also be present with the Superintendent. He is very anxious to make personal representation with a view to expedite this question.

Thanking you for a line in reply.

Yours sincerely,
C E Srinivasayyangar

M. Venkatanaranappa, Esq., B.A.,
Secretary to the Government of Mysore,
Development Department, Bangalore.

D.S.R.

Appendix F G—1]

SUBJECT.....

.....

.....

Immediate

Section Genl

File No. 27-36

Serial No. 3

Diary No. of letter replied to.....

No. D. 3136 dd 9/11/36

To

Dear Sir,

General and Revenue Secretariat

( )

the *193* .

Date of issue 9.11.36

Signed by Dy KA Rao

With refce to your letter no. 986 d 2/11/36 seeking an interview with the Secnd Member of Council in connection with the grant of permission to work the new ropes in Giffordshaft on the reduced factor of safety, I am desired to state that necessary action is being taken & orders may be expected very soon. An interview seems unnecessary but if the Superintendent of Champion Reef Mine ~~you consider it desirable~~, the Secnd Member will be glad to receive him at

List of enclosures.....

Copied by In the circumstances so desires

Examined by.....

WD 03601—GPB—80,000—23-9 35

3 o'clock on Wednesday the 11th inst
in his Chambers in the Public Offices at B'lore.

Y. S.

To C. E. Srinivasaraghava Rau Esqr., Mem. A.I.M.E. etc,
Chief Insptr. of Mines & Explosives in Mysore,
Bangalore

9/11/31

Geol 27-36-4

GOVERNMENT OF MYSORE.

Telegraphic Address :—
"MINESPECTOR"

DEVELOPMENT BRANCH
11 NOV. 1936

DEPARTMENT OF MINES AND EXPLOSIVES.

OFFICE OF THE CHIEF INSPECTOR OF MINES IN MYSORE.

No. 1049.
Encl:

Dated Oorgaum, ...10th November.... 1936.
(S. India).

FROM

C. E. SURYANARAYANA RAU, ESQ., MEM. A.I.M.E., ETC.,
Chief Inspector of Mines and Explosives in Mysore.

To

M. Venkatanaranappa, Esq., B.A.,
Secretary to the Government of Mysore,
Development Department,
Bangalore.

Sir,

I have the honour to confirm the following telephone message sent to you this morning:-

"The Superintendent, Champion Reef does not
"desire to meet the Second Member of Council
"tomorrow as an interview is unnecessary in
"the circumstances stated in your D.O. letter
"No.D.3136-Geol-27-36 dated 9th November 1936".

I have the honour to be,
Sir,
Your most obedient servant,

C E Suryanarayana Rau

Chief Inspector of ~~Mines~~ &
Explosives in Mysore.

Md.S.

12

Appendix F G—1]

SUBJECT..... 32

.....

.....

Grant of subsidy

Section Legal

File No. 27-36

Serial No. 5

Diary No. of letter replied to.....

No. D. 3253 - 8/16/11/38

To

Notification

In exercise of the powers conferred by Section 21 ~~of~~ of the Mysore Mines Regulation, 1906, the Govt of H.H. the Maharaja ~~of Mysore~~ are pleased to make the following amendment to the Rules framed under the said Regulation:

~~Rule 20 of the Rules~~

~~Add the following after~~

At the beginning of ~~Add to the existing~~ Rule 70 (4) (b) add at the beginning the following words:-

"Unless exemption has been obtained from Government

General and Revenue Secretariat

( )

the *193* .

Date of issue 16. 11. 38

Signed by [illegible]

List of enclosures.....

Copied by [illegible] 16/11

Examined by.....

-37-

in consideration of the great depth of the shaft or of the low winding speed,

B.O

NW.

Dy Secy
11.11.36.

To, The compiler, Mysore Gazette
for publication & supply of 80 copies of the notification.

Memo no D 3256 dt 16/11/36

Copy to the clerk in charge
Mines & Boilers
for information & necessary action in connection with his letter no [illegible] dt 12/11/36

B.O

NW.

11.11.36 Dy Secy

The rule as amended will read as under:

"Unless exemption has been obtained from Government in consideration of the great depth of the shaft or of the low winding speed, winding ropes shall not be used for raising and lowering persons when, owing to deterioration or from any other cause, the breaking stress has become reduced to below six times the maximum working load."

34

Government of His Highness the Maharaja of Mysore.

General and Revenue Secretariat.

No. D 3255 / Genl. 27.36-1

Dated Bangalore the 14th November 1936.

NOTIFICATION.

In exercise of the powers conferred by Section 21 of the Mysore Mines Regulation, 1906, the Government of His Highness the Maharaja are pleased to make the following amendment to the Rules framed under the said Regulation.-

At the beginning of Rule 70 (4) (b) add the following words -

"Unless exemption has been obtained from Government in consideration of the great depth of the shaft or of the low winding speed,"

The rule as amended will read as under -

"Unless exemption has been obtained from Government in consideration of the great depth of the shaft or of the low winding speed, winding ropes shall not be used for raising and lowering persons when, owing to deterioration or from any other cause, the breaking stress has become reduced to below six times the maximum working load".

By Order,

Sd/- M. Venkataramanappa.
Secretary to Government
Development Department.

To

The Compiler, Mysore Gazette for publication and supply of 80 copies of the Notification.

c.n.12

Memo No. D. 3256 & 16/11/36

Copy of the above is forwarded with compliments to the Chief Inspector of Mines and Explosives with reference to correspondence ending with his letter No. 886 dated 17th October 1936.

By Order,

For Secretary to Government
Development Department.

35

Government of His Highness the Maharaja of Mysore.

General and Revenue Secretariat.

No. D.3255 / Gen 27-36.

Dated Bangalore the 14th/16th November 1936.

NOTIFICATION.

In exercise of the powers conferred by Section 21 of the Mysore Mines Regulation, 1906, the Government of His Highness the Maharaja are pleased to make the following amendment to the Rules framed under the said Regulation.-

At the beginning of Rule 70 (4) (b) add the following words -

"Unless exemption has been obtained from Government in consideration of the great depth of the shaft or of the low winding speed,"

The rule as amended will read as under -

"Unless exemption has been obtained from Government in consideration of the great depth of the shaft or of the low winding speed, winding ropes shall not be used for raising and lowering persons when, owing to deterioration or from any other cause, the breaking stress has become reduced to below six times the maximum working load".

By Order,

K. Narayan.

for Secretary to Government
Development Department.

To

The Compiler, Mysore Gazette for publication and supply of 80 copies of the Notification.

.e.n.12.

36

Government of His Highness the Maharaja of Mysore.

General and Revenue Secretariat.

No.D-3255 / Ecm-29-36-15

Dated Bangalore the 14th November 1936.

TB

NOTIFICATION.

In exercise of the powers conferred by Section 21 of the Mysore Mines Regulation,1906, the Government of His Highness the Maharaja are pleased to make the following amendment to the Rules framed under the said Regulation.-

At the beginning of Rule 70 (4) (b) add the following words -

"Unless exemption has been obtained from Government in consideration of the great depth of the shaft or of the low winding speed,"

The rule as amended will read as under -

"Unless exemption has been obtained from Government in consideration of the great depth of the shaft or of the low winding speed, winding ropes shall not be used for raising and lowering persons when, owing to deterioration or from any other cause, the breaking stress has become reduced to below six times the maximum working load".

By Order,

K. Veeraraghavan

Secretary to Government
Development Department.

To

the Compiler, Mysore Gazette for publication and supply of 80 copies of the Notification.

e.n.12

NOTIFICATION.

No. D. 3255—*Geol.* 27-36-5, *dated Bangalore, the* 14—16*th November* 1936.

In exercise of the powers conferred by Section 21 of the Mysore Mines Regulation, 1906, the Government of His Highness the Maharaja are pleased to make the following amendment to the Rules framed under the said Regulation :—

At the beginning of Rule 70 (4) (b) add the following words :—

> " Unless exemption has been obtained from Government in consideration of the great depth of the shaft or of the low winding speed,"

The rule as amended will read as under.—

> " Unless exemption has been obtained from Government in consideration of the great depth of the shaft or of the low winding speed, winding ropes shall not be used for raising and lowering persons when, owing to deterioration or from any other cause, the breaking stress has become reduced to below six times the maximum working load ".

By Order,

M. VENKATANARANAPPA,

Secretary to Government,
Development Department.

Printed by the Superintendent at the Government Press, Bangalore.

GOVERNMENT OF MYSORE.

Telegraphic Address
"MINESPECTOR"

2592

18 NOV. 1936

DEVELOPMENT BRANCH

DEPARTMENT OF MINES AND EXPLOSIVES.

OFFICE OF THE CHIEF INSPECTOR OF MINES IN MYSORE.

No. 1083.
Encl:

Dated Oorgaum, 17th November ..... *1936.*
(S. India).

FROM

C. E. SURYANARAYANA RAU, ESQ., MEM. A.I.M.E., ETC.,
Chief Inspector of Mines and Explosives in Mysore.

To

M. Venkatanaranappa, Esq., B.A.,
Secretary to the Government of Mysore,
Development Department, Bangalore.

Sir,

I have the honour to confirm the following telephone message sent to you today:-

"I request that the issue of orders
"regarding the exemption under amended
"rule No.70 (4) (b) Mysore Mining Rules
"for winding rope in Gifford Shaft as
"recommended in my letter No,990 dated
"2-11-1936 may kindly be expedited, as
"the Superintendent, Champion Reef Mine,
"has been pressing for it.

"Chief Inspector of Mines & Explosives."

I have the honour to be,
Sir,
Your most obedient servant,

C E Suryanarayana Rau

Chief Inspector of Mines &
Explosives in Mysore.

2

Geol 27-36-6

D 3380

Dated 23/4/36.

PROCEEDINGS OF THE GOVERNMENT OF H.H. THE MAHARAJA OF MYSORE.

READ:-

Government Notification No.D. 3255/Geol.27-36-5 dated 16th November 1936 notifying the amendment of Rule 70(4)(b) of the Mysore Mining Rules.

2. Correspondence ending with letter No.990 dated 2-11-1936 from the Chief Inspector of Mines and Explosives, recommending the grant of exemption under Rule 70(4)(b) amended as above regarding the reduction of the factor of safety of a new winding rope proposed to be used in Gifford's shaft, Champion Reef Mine.

ORDER NO:

Dated, Bangalore, the

It is reported that ~~the~~ Gifford's Vertical Shaft in Champion Reef Gold Mine is now being deepened from various horizons to an ultimate depth of 6556 ft. below surface to facilitate single stage winding from ultra deep levels. A powerful electric winder capable of a rope speed of 3000 ft. per minute is proposed to be installed on surface. Preformed triangular strand steel wire rope 1 7/8th " in diameter is proposed to be used on this winder. The factor of safety of the rope is stated to be 5.65 for hauling ore, 6.01 for raising men and material and 6.43 for raising and lowering of persons. As the strength of the new rope is liable to get reduced in due course owing to wear and tear below the prescribed factor of safety which is 6 times the maximum

working load, the Superintendent, Champion Reef Mine has applied for permission to reduce the factor of safety of the new winding rope from 6 to 5.

The Chief Inspector of Mines reports that the new rope satisfies all the conditions imposed upon it by the Government Mining Engineer of South Africa whom he consulted in this connection. He further reports that the Chief Inspector of Mines in India who was also consulted in the matter thinks that the arrangement proposed for testing the rope is sufficient and that the exemption asked for may be granted He therefore recommends sanction to operate the new winding rope in the Gifford's shaft on the lower factor of safety, subject to the following conditions:-

1) The rope to be discarded when the breaking stress has become reduced to 5.10.

2) The rope to be recapped every six months, a portion of the rope cut at the time sent to a recognised testing Laboratory and the result of the test to be obtained by cable and notified without delay to the Chief Inspector of Mines and Explosives in Mysore.

3) Not more than 12 persons to ride at the top deck when the bottom deck is loaded with the ore trucks.

Government are pleased to sanction the recommendation of the Chief Inspector of Mines and Explosives.

Secretary to Govt.
Dev. Deptt.

To

The Chief Inspector of Mines and Explosives.

PROCEEDINGS OF THE GOVERNMENT OF HIS HIGHNESS THE MAHARAJA OF MYSORE.

-----:0:-----

41

R e a d : -

Government Notification No. D. 3255/Geol. 27-36-5 dated the 16th November 1936 notifying the amendment of Rule 70 (4) (b) of the Mysore Mining Rules.

2. Correspondence ending with letter No. 990 dated the 2nd November 1936 from the Chief Inspector of Mines and Explosives, recommending the grant of exemption under Rule 70 (4) (b) amended as above regarding the reduction of the factor of safety of a new winding rope proposed to be used in Gifford's shaft, Champion Reef Mine.

Order No. D 3383 / Geol 27-36-6

Dated, Bangalore, 23rd November 1936.

It is reported that Gifford's Vertical Shaft in Champion Reef Gold Mine is now being deepened from various horizons to an ultimate depth of 6556 feet below surface to facilitate single stage winding from ultra deep levels. A powerful electric winder capable of a rope speed of 3000 feet per minute is proposed to be installed on surface. Preformed triangular strand steel wire rope 1 7/8th" in diameter is proposed to be used on this winder. The factor of safety of the rope is stated to be 5.65 for hauling ore, 6.01 for raising men and material and 6.43 for raising and lowering of persons. As the length of the new rope is liable to get reduced in due course owing to wear and tear below the prescribed factor of safety which is 6 times the maximum working load, the Superintendent, Champion Reef Mine, has applied for permission to reduce the factor of safety of the new winding rope from 6 to 5.

The Chief Inspector of Mines and Explosives recommends sanction to operate the new winding rope in Gifford's shaft on the lower factor of safety, subject to the following conditions:-

(1) The rope to be discarded when the breaking stress has become reduced to 5.10.

(2) The rope to be recapped every six months, a portion of the

the rope cut at the time sent to a recognised testing Laboratory and the result of the test to be obtained by cable and notified without delay to the Chief Inspector of Mines and Explosives in Mysore.

(3) Not more than 12 persons to ride at the top deck when the bottom deck is loaded with the ore trucks.

Government are pleased under Rule 70 (4) (b) of the Mysore Mining Rules, to sanction the recommendation of the Chief Inspector of Mines and Explosives.

For Secretary to Government,
Development Department

P.H.

To, The chief Inspector of Mines & Explosives